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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,571	12/02/2005	Timothy W Downey	A34649PCTUSA(065855.0333)	8420
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EXAMINER ZELANO, JOEIN A				
ART UNIT 4156		PAPER NUMBER		
NOTIFICATION DATE 09/12/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DL.NYDOCKET@BAKERBOTTS.COM

Office Action Summary

Application No.

10/518,571

Applicant(s)

DOWNEY ET AL.

Examiner

JOHN ZELANO

Art Unit

4156

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 12/22/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter. In order for a method to be considered a "process" under 35 U.S.C. 101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 U.S.C. 101 and is nonstatutory subject matter.

Claims 1-9 do not recite a substantive tie of the method to another statutory class in the body of the claim. As such, these claims are rejected as non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6-10, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarus et al in view of their patent (**US 7165037 B2**, hereinafter referred to as Lazarus), Predictive Modeling of Consumer Financial Behavior Using Supervised Segmentation and Nearest-Neighbor Matching in view of Johnson et al, Integrated Computerized Sales Force Automation, (**US 6067525**, hereinafter referred to as Johnson).

As to claim 1 Lazarus discloses a system for predicting consumer financial behavior based on sales data obtained from various merchants. This method is directly

related to the present application in that the merchants can be readily substituted for salespeople or a sales group as long as the sales information is available to the system performing the method. Lazarus discloses a method for measuring performance discrepancies among sales segments associated with consumer or market data, comprising the steps of: (a) maintaining a market data in a database (Lazarus, column 19, line 63 to column 20, line 33); (b) summarizing at least a portion of said market data according to one or more different merchant segments (Lazarus, column 38, line 29 to column 39, line 38, in this instance sales territories can be seen as suggested by reporting the different merchant segments in different geographical locations or territories associated with the market data as defined by user input parameters); (c) performing a recursive partitioning analysis on said summarized market data to thereby partition said summarized market data into a plurality of nodes (represented as market segments) which for identifying significant segmentation variables (Lazarus, column 15, lines 33-49); (d) bridging said portion of said market data with each one or more of said plurality of nodes (segments) to provide a bridged plurality of nodes (Lazarus, Table 3 and column 19, lines 17-56 and column 32, lines 1-24); and (e) retaining an association between said at least a portion of said market data and each bridged plurality of nodes as an additional segmentation variable (Lazarus, column 32, line 26 to column 33, line 3).

Lazarus does not teach organizing his data around particular sales agent territories. Johnson teaches a computerized sales force automation system designed to organize and forecast sales data for agents by individual sales territories, wherein the

system summarizes at least a portion of said market data according to one or more sales territories selected from a market sales territory associated with the market data, thereby providing summarized market data (Johnson, column 6, line 64 to column 7, line 14, column 20, lines 8-29, and column 21, lines 29-51). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the ability to view market data by sales agent territories from Johnson to the segmentation procedure of Lazarus in order to provide multiple views of sales market data and forecasts in a particular segment or territory.

As to claim 6, Lazarus discloses the invention substantially as claimed. See the discussion of claim 1. Lazarus teaches a method further comprising the step of monitoring sales performance (column 38, lines 29-46) and updating the market data (column 38, lines 1-27).

As to claim 7, Lazarus discloses the invention substantially as claimed. See the discussion of claim 6. Lazarus teaches a method further comprising the step of tracking sales performance (column 38, line 47 to column 39, line 38) and tracking the results of the partitioning step (column 39, line 40 to column 40, line 25).

As to claim 8, Lazarus discloses the invention substantially as claimed. See the discussion of claim 1. Lazarus teaches a method further comprising the step establishing a model for analysis (column 35, line 61 to column 36, line 55).

As to claim 9, Lazarus discloses the invention substantially as claimed. See the discussion of claim 8. Lazarus teaches a method further comprising the steps of (i) defining a relevant market (column 37, lines 12-67); (ii) identifying relevant factors of

the relevant market (column 38, line 47 to column 39, line 38); (iii) collecting market and sales data associated with the relevant factors (column 38, lines 1-28) and segmenting and sizing a market territory described by the market and sales data according to the relevant market (column 43, line 8; to column 44, line 24).

System claims 10, 15-18 repeat the subject matter of claims 1 and 6-10 as a set of "means-plus-function" elements rather than a series of steps. As the underlying process has been shown to be fully disclosed by the teachings of Lazarus in the above rejections of claims 1 and 6-10, it is readily apparent that the Lazarus reference includes a system to perform the recited functions. As such, these limitations are rejected for the same reasons provided in the rejection of claims 1 and 6-10 and incorporated herein.

Claims 2-5 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarus in view of Johnson and Pednault et al, Method For Constructing Segmentation-Based Predictive Models, (**US 2003/0176931 A1**, hereinafter referred to as Pednault).

As to claim 2, see the discussion of claim 1. Lazarus teaches a recursive partitioning analysis (Lazarus, column 15, lines 33 to 49). Lazarus does not teach displaying the plurality of nodes (segments) in a node tree with associated non-partitioned data in the database. Pednault teaches displaying the plurality of segment nodes in a node tree with associated non-partitioned data in the database (Pednault, Figure 1, and paragraphs 32-35, 248-249). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the ability of displaying nodes

in a tree to the methods of Lazarus and Johnson in order to present a clearer visual presentation of market segmentation.

As to claim 3, see the discussion of claim 1. Lazarus teaches a recursive partitioning analysis (Lazarus, columns 12-16). Lazarus does not teach including the step of utilizing an exhaustive Chi-squared automatic interactive detector. Pednault teaches the step of performing a recursive partitioning analysis wherein the analysis includes the step of utilizing an exhaustive Chi-squared automatic interactive detector (Pednault, paragraphs 250-252). It would have been obvious to one of ordinary skill in the art at the time of the invention to add an exhaustive Chi-squared interactive detector to the partitioning algorithms of Lazarus in order to obtain a more robust segmentation of market data.

As to claim 4, Lazarus discloses the invention substantially as claimed. See the discussion of claim 1. Lazarus teaches a method further comprising the step of entering at least one additional segmentation variable based on the associated non-partitioned data (column 34, line 28 to column 35, line 59).

As to claim 5, Lazarus discloses the invention substantially as claimed. See the discussion of claim 1. Lazarus teaches a method further comprising the step of performing an additional partitioning analysis of the summarized market data wherein the summarized market data is partitioned into an additional plurality of nodes (Lazarus, column 12, line 23 to column 16, line 64).

System claims 11-14 repeat the subject matter of claims 2-5 as a set of "means-plus-function" elements rather than a series of steps. As the underlying process has

been shown to be fully disclosed by the teachings of Lazarus and Pednault in the above rejections of claims 2-5, it is readily apparent that the Lazarus and Pednault references include a system to perform the recited functions. As such, these limitations are rejected for the same reasons provided in the rejection of claims 2-5 and incorporated herein.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are:

Paul B. Chou et al (**US 6061658 A**)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN ZELANO whose telephone number is (571)270-7047. The examiner can normally be reached on Monday through Friday, 7:30AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN ZELANO/
Examiner, Art Unit 4156
8/27/2008

/Charles R. Kyle/
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